PLANT IMMIGRANTS.

No. 151.

NOVEMBER, 1918.

GENERA REPRESENTED IN THIS NUMBER.

a specific control of the second of		S.P.I. No.	e de la companie		· · · · · · · · · · · · · · · · · · ·	Page
Canarium		(46487)				1369
Copernicia		(46561)			-	1369
Eruca		(46501)			The second of th	1369
Madhuca	ex series	(46535)		range of	and projection	1369
Normanbya	i i i i i i i i i i i i i i i i i i i	(46531)		in the second of	ren verrana. V	1369
Pahudia	e de la companya de La companya de la co	(46488)		an are en la partie. Le la Saga	معان رماج: معارماج:	1370
Prunus	(46533)	, (46534)		e ver		1370
Pyrus	م چې فران د کا مساملہ اوران د اوران	(46566)	• •			1370
*		(46576			er en skale begge er en	1371
		to				to
		46587)	e garage			1374
Trichosanth	es	(46642)	s in the second of the second			1374

121014 1944-112-116

Foreign Seed and Plant Introduction.



EXPLANATORY NOTE.

This multigraphed circular is made up of descriptive notes furnished mainly by Agricultural Explorers and Foreign Correspondents relative to the more important introduced plants which have recently arrived at the Office of Foreign Seed and Plant Introduction of the Bureau of Plant Industry of the Department of Agriculture, together with accounts of the behavior in America of previous introductions. Descriptions appearing here are revised and published later in the INVENTORY OF PLANTS IMPORTED.

Applications for material listed in these pages may be made at any time to this Office. As they are received they are placed on file, and when the mateis ready for the use of experimenters sent to those on the list of applicants who can show that they are prepared to care for it as well as to others selected because of their special fitness to experiment with the particular plants imported. not wait for the annual catalogue entitled NEW PLANT INTRODUCTIONS which will be sent you in the autumn and in which will be listed all plants available at that time. Regular requests checked off on the check list sent out with the catalogue are not kept over from year to year. If you are especially interested in some particular plant in the catalogue write and explain in detail your fitness to handle it.

One of the main objects of the Office of Foreign Seed and Plant Introduction is to secure material for plant experimenters, and it will undertake as far as possible to fill any specific requests for foreign seeds or plants from plant breeders and others interested.

David Fairchild,

Agricultural Explorer in Charge,

April 2, 1919.

Anyone desiring to republish any portion of this circular should obtain permssion by applying to this Office.



Canarium luzonicum (Balsameaceae), 46487. From Philippine Islands. Collected by Mr. N. Catalan, College of Agriculture. "Seeds collected from Mt. Maquiling, Los Banos. The tree is a source of the 'brea blanca' of commerce. The stone of the fruit contains an oily endosperm which is very good to eat. The plant occurs in the forest in lower elevations." (Catalan.)

Copernicia cerifera (Phoenicaceae), 46561. Wax palm. From Pernambuco, Brazil. Presented by Mr. H. M. Curran. A palm, 25 to 30 feet high, with fan-shaped, rather finely cut leaves 2 to 3 feet in diameter. The wax is extracted by drying the leaves in the sun, when the wax appears in the form of a powder. The fruit is valued for hog feed. The trunks are extensively employed in building houses. (Adapted from description of S. P. I. No. 37866, by Dorsett, Shamel, and Popenoe.)

Eruca sativa (Brassicaceae), 46501. Roquette. From Sibpur, Calcutta, India. Presented by Mr. A. T. Gage, Director, Royal Botanic Gardens. Roquette, or rocketsalad, is a low-growing plant, from southern Europe, the leaves of which resemble those of radish and turnip. It is much used by the French as a spring and autumn salad and pot-herb. The flavor of the young, tender leaves bears a strong resemblance to that of horseradish. (Adapted from Bailey, Standard Cyclopedia of Horticulture, vol. 5, p. 2981.)

Madhuca indica (Sapotaceae), 46535. Mahwa. From Saharanpur, India. Presented by Mr. A. C. Hartless, Superintendent, Government Botanic Gardens. "A large, deciduous tree from northern India, cultivated widely in India for its cream-colored, fleshy, sweet corollas, which are dried for eating and for the manufacture of spirits." (Stuntz.)

Normanbya merrillii (Phoenicaceae), 46531. Palm. From Manila, P. I. Presented by Mr. E. D. Merrill, Acting Director, Bureau of Science. "Bonga de China or Bonga de Jolo. A medium-sized palm, with graceful, somewhat curved, pinnate leaves, resembling the common betel nut palm, but not so tall. The leaves are rather glaucous, and the pretty crimson fruits are borne just below the leaves in medium-sized bunches, — the individual fruits are less than one inch long. This palm thrives remarkably well in Manila." (Merrill.)

Pahudia rhomboidea (Caesalpiniaceae), 46488. From Philippine Islands. Collected by Mr. N. Catalan, College of Agriculture. "Tindalo. Seeds collected from Mt. Maquiling, Los Banos. A tree that usually occurs in somewhat open situations of low elevations. The wood is very durable and beautifully colored; used for finer constructions; one of the best Philippine woods." (Catalan.)

Prunus serrulata sachalinensis (Amygdalaceae), 46533. Sargent's cherry. From Jamaica Plain, Mass. Presented by Dr. C. S. Sargent, Arnold Arboretum. A handsome large tree, of great ornamental value; hardy as far north as Massachusetts, and bearing profusely in early spring, handsome rose-pink single flowers. (Adapted from Bailey, Standard Cyclopedia of Horticulture, vol. 5, p. 2839.)

Prunus tomentosa (Amygdalaceae), 46534. Bush cherry. From Jamaica Plain, Mass. Presented by Dr. C. S. Sargent, Arnold Arboretum. This broad, vigorous shrub from northern China, is one of the earliest cherries to flower. The flowers are large, with the white petals more or less tinged with red towards the base; and the small, bright red, slightly hairy fruits are of good flavor. (Adapted from Arnold Arboretum Bulletin of Popular Information, No. 19.) "The plant thrives and fruits abundantly from Georgia to Canada. The ripe fruits make a delicious jelly." (Bisset.)

Pyrus communis x serotina (Malaceae), 46566. Pear. From Avery Island, Louisiana. Cuttings presented by Mr. E. A. McIlhenny. "This pear originated in the orchard of Mr. E. A. McIlhenny, Avery Island, La. Mr. McIlhenny has a LeConte orchard, 8 or 9 years old, propagated from trees made from cuttings. The original trees from which the cuttings were taken have been lost. trees in the LeConte orchard are of the new type and differ materially from the Leconte trees. The new type is spreading in habit, and has roundish fruit about as large as a medium-sized apple. The fruit is of fair quality, comparing favorably with LeConte. It is believed that the 8 trees are bud sports from a limb or branch from which the original cuttings were taken. The fact that there are only 8 trees would indicate that there was a limited amount of wood. This pear is of interest because up to this time it has been practically free from fire blight, while the LeConte trees in the same orchard have blighted badly." (B. T. Galloway.)

Pyrus phaeocarpa (Malaceae), 46582. Pear. From Cuttings collected by Prof. F. C. Reimer, Superintendent, Southern Oregon Experiment Station, Talent. "No. 36. A pear which is used as a rootstock for cultivated pears at Seoul, Korea. This type produces its fruit in clusters of from 3 to 8. The pears are from one-half to three-fourths of an inch in diameter, roundish, or short-turbinate in shape, brown or russet in color, and with 3 (or rarely 2 or 4) covered cells or seed cavities. The trees which I saw were still young and from 6 to 12 feet high. The young shoots are densely pubescent. The leaves are of medium size and the margins are crenate or bluntly serrate. These trees had evidently grown up from the rootstock of some cultivated varieties of pears. Of no value except possibly as stock in this country." (Reimer.)

Pyrus serotina (Malaceae), 46583. Pear. From Japan. Cuttings collected by Prof. F. C. Reimer, Superintendent, Southern Oregon Experiment Station, Talent. "No. 38. Imamura Aki. Obtained at Yokohama, Japan. This is one of the best varieties of pears in Japan and Korea. It is a large, russet pear, and distinctly evoid in shape. The fruit ripens late in the fall, and in the early winter it is in the best condition to be eaten. In quality it ranks with the best Japanese pears." (Reimer.)

Pyrus serotina (Malaceae), 46584. Pear. From Japan. Cuttings collected by Prof. F. C. Reimer, Superintendent, Southern Oregon Experiment Station, Talent. "No. 39. Meigetsu. Obtained at Yokohama, Japan. This is considered the very finest pear in Japan and Korea. It is a very large pear, oblong or oblong-elliptical in shape, and of a bright russet color. The tree is very vigorous and productive. It should be thoroughly tested in this country especially for blight-resistance." (Reimer.)

Pyrus sp. (Malaceae), 46576. Pear. From China. Cuttings collected by Prof. F. C. Reimer, Superintendent, Southern Oregon Experiment Station, Talent. "No. 51. Mi Li. Obtained at Mao Shan, near Malanyu, Chihli, China. This is a roundish, medium-sized pear, about 2 inches in diameter. It is yellow in color, and the calyx is deciduous. The flesh is firm and juicy, and the grit cells are not noticeable. The flavor is

sweetish and the quality only fair. In some places in northern China this pear has proved to be the most profitable variety." (Reimer.)

Pyrus sp. (Malaceae), 46577. Pear. From China. Cuttings collected by Prof. F. C. Reimer, Superintendent, Southern Oregon Experiment Station, Talent. "No. 52. Obtained at Mao Shan, near Malanyu, Chihli, This is a large pear, ovate or ovate-oblong China. and of a russet color. shape. The calyx is The flesh is firm and the grit cells are deciduous. not noticeable. The flavor is sweet and of fair quality. This is an interesting variety, since it shows some of the characteristics of P. ussuriensis, especially in leaf characters, while the russet color of the fruit is not characteristic of this species. It may be a hybrid with P. ussuriensis as one of the parents." (Reimer.)

Pyrus sp. (Malaceae), 46578. Pear. From China. Cuttings collected by Prof. F. C. Reimer, Superintendent, Southern Oregon Experiment Station, Talent. "No. 53. Fo Chien Hsi. Obtained at Mao Shan, near Malanyu, Chihli, China. This pear is of medium size, slightly flattened, yellowish in color, and with the calyx deciduous. The flesh is hard, juicy, and rather sweet. It is an excellent keeper and shipper. Highly regarded in northern China." (Reimer.)

Pyrus sp. (Malaceae), 46579. Pear. From China. Cuttings collected by Prof. F. C. Reimer, Superintendent, Southern Oregon Experiment Station, Talent. "No. 55. Ma Li. Obtained at Mao Shan, near Malanyu, Chihli, China. This flat pear is medium to large, yellow in color, russet toward the base, and covered with small, light dots. It has a deciduous calyx and the stem is of medium length. The flesh is firm, rather coarse, sweet, and fair in quality. It ripens the latter part of August in northern China." (Reimer.)

Pyrus sp. (Malaceae), 46580. Pear. From northern China. Cuttings collected by Prof. F. C. Reimer, Superintendent, Southern Oregon Experiment Station, Talent. "No. 58. Yarh Li. Obtained at Mao Shan, near Malanyu, Chihli, China. This is the most widely grown pear in northern China. It is of large size, and resembles Bartlett in shape. It has a beautiful, clear, light yellow color. The flesh is firm, juicy, and sweet, and free from grit cells. This pear possesses extraordinary

keeping qualities, and can be purchased at any time throughout the entire winter. It is in best condition to be eaten during the latter part of winter and early spring." (Reimer.)

Pyrus sp. (Malaceae), 46581. Pear. From China. Cuttings collected by Prof. F. C. Reimer, Superintendent, Southern Oregon Experiment Station, Talent. "No. 59. Hung Li, or 'Red Pear.' Obtained at Mao Shan, near Malanyu, Chihli, China. This pear is of medium size, distinctly round in shape, yellow with a beautiful red blush. This red color is quite rare in oriental pears. The flesh is very firm, juicy, and sweet, but not high in quality. It is an extraordinary keeper, and can be found on the markets until late winter." (Reimer.)

Pyrus ussuriensis (Malaceae), 46585. Pear. From Cuttings collected by Prof. F. C. Reimer, Superintendent, Southern Oregon Experiment Station, Talent. "No. 50. Ta Suan Li. The name means 'Big Sour Pear.' Obtained at Mao Shan, near Malanyu, Chihli, China. This is one of the most interesting and may prove one of the most valuable pears that I saw in China. It is very popular in the mountain districts northeast of Peking. The fruit is medium to large in size, slightly flattened in shape and greenish yellow in color. It has a persistent calyx, and the stem is medium to long. flesh is hard, possesses large grit cells around the core, and has a very tart flavor. It is an excellent keeper and, under suitable conditions, often retains its standard quality until early spring. While it cannot be recommended as a desirable commercial variety, it should prove of great value in breeding blight-resistant and hardy varieties for cold regions. In our work the wild P. ussuriensis has shown greater resistance to pear blight than any other species, and since this species also endures more cold than any other, this variety should prove of great value in breeding work." (Reimer.)

Pyrus ussuriensis (Malaceae), 46586. Pear. From China. Cuttings collected by Prof. F. C. Reimer, Superintendent, Southern Oregon Experiment Station, Talent. "No. 54. E'Li or Nah Li. Obtained at Mao Shan, near Malanyu, Chihli, China. The fruit of this pear is very large, of oblong shape and greenish color. It ripens the latter part of September, is very fragrant and of poor flavor. The calyx is persistent. It is to be regretted that the flavor is not better; however,

its large size, and the fact that it belongs to *P. ussuriensis* makes it a promising variety for breeding purposes." (Reimer.)

Pyrus ussuriensis (Malaceae), 46587. Pear. From China. Cuttings collected by Prof. F. C. Reimer, Superintendent, Southern Oregon Experiment Station, Talent. "No. 56. Chieh Li. Obtained at Mao Shan, near Malanyu, Chihli, China. This pear is of medium size, oblong in shape, and green in color. The calyx is persistent. It ripens the latter part of August. The quality is only fair, but this variety should prove valuable in breeding work." (Reimer.)

Trichosanthes quinquangulata (Cucurbitaceae), 46642. From Philippine Islands. Presented by Mr. P. J. Wester, Agricultural Advisor, Zamboanga, P. I. "A cucurbitaceous vine, of vigorous growth, indigenous to the Philippines. The fruit is globose and somewhat larger than an apple, the surface being a brilliant red. As the fruit keeps well, and retains its color, I believe that it might be used to great advantage for decorative purposes." (Wester.)

United States Department of Agriculture.
Bureau of Plant Industry.

Office of Foreign Seed and Plant Introduction. Washington, D. C.

Washington Scientific Staff.

David Fairchild, Agricultural Explorer in Charge.

P. H. Dorsett, Plant Introducer, in Charge of Plant Introduction Field Stations.

B. T. Galloway, Plant Pathologist.

Peter Bisset, Plant Introducer, in Charge of Foreign Plant Distribution.

J. B. Norton, and Wilson Popence, Agricultural Explorers.

H. C. Skeels, G. P. Van Eseltine, and R. A. Young, Botanical Assistants.

Miss Bessie Broadbent, E. L. Crandall, L. G. Hoover, J. H. Johnson, R. N. Jones, P. G. Russell, and C. C. Thomas, Assistants.

Edward Goucher, Plant Propagator.

Field Stations Scientific Staff.

R. L. Beagles, Superintendent in Charge Plant Introduction Field Station, Chico, Cal. E. O. Orpet, Assistant in Plant Introduction.

J. E. Morrow, Superintendent in Charge, (Yarrow) Plant Introduction Field Station, Rockville, Md.

Edward Simmonds, Superintendent in Charge, Plant Introduction Field Station, Miami, Fla.

D. A. Bisset, Assistant in Charge, Plant Introduction Field Station, Brooksville, Fla.

Henry E. Juenemann, Superintendent in Charge, Plant Introduction Field Station, Bellingham, Wash.

E. J. Rankin, Assistant in Charge, Plant Introduction Field Station, Savannah, Georgia.

Collaborators.

Mr. Aaron Aaronsohn, Haifa, Palestine.

Mr. Thomas W. Brown, Cairo, Egypt.

Mr. H. M. Curran, Laurel, Md.

Mr. M. J. Dorsey, University Farm, St. Paul, Minn.

Mr. Robt. H. Forbes, Societe Sultanienne D'Agriculture, Cairo, Egypt.

Mr. A. C. Hartless, Saharanpur, India.

Mr. Barbour Lathrop, Chicago, Ill.

Mr. H. Nehrling, Gotha, Fla.

Mr. Charles Simpson, Littleriver, Fla.

Mr. H. P. Stuckey, Experiment, Ga.

Dr. L. Trabut, Director, Service Botanique, Algiers, Algeria.

Mr. H. N. Whitford, School of Forestry, New Haven, Conn.

Mr. E. H. Wilson, Arnold Arboretum, Jamaica Plain, Mass.

Dr. F. A. Woods, Washington, D. C.